

10th Class 2018

Physics	Group-I	Paper-II
Time: 15 Minutes	(Objective Type)	Max. Marks: 12

Note: Four possible answers A, B, C and D to each question are given. The choice which you think is correct, fill that circle in front of that question with Marker or Pen ink in the answer-book. Cutting or filling two or more circles will result in zero mark in that question.

1-1- **The relation between v , f and λ of a wave is:**

- (a) $vf = \lambda$ (b) $f\lambda = v \checkmark$
(c) $v = \frac{\lambda}{f}$ (d) $v\lambda = f$

2- **Which is an example of a longitudinal wave:**

- (a) Sound wave \checkmark (b) Light wave
(c) Radio wave (d) Water wave

3- **Index of refraction of diamond is:**

- (a) 1.52 (b) 1.66
(c) 2.21 (d) 2.42 \checkmark

4- **Speed of light in water is:**

- (a) $3 \times 10^8 \text{ ms}^{-1}$ (b) $2.3 \times 10^8 \text{ ms}^{-1} \checkmark$
(c) $2 \times 10^8 \text{ ms}^{-1}$ (d) $1 \times 10^8 \text{ ms}^{-1}$

5- **S.I unit of charge is:**

- (a) Kg (b) Newton
(c) Volt (d) Coulomb \checkmark

6- **One volt is equal to:**

- (a) 1 JC (b) 1 JC⁻¹ \checkmark
(c) 1 J/C² (d) 1 NC⁻¹

7- **When we double the voltage in a simple electric circuit, we double the:**

- (a) Current \checkmark (b) Power
(c) Resistance (d) Both a & b \checkmark

- 8- **Mathematical form of Ohm's Law is:**
- (a) $P = IV$ (b) $V = IR$ ✓
(c) $Q = It$ (d) $W = Q / V$
- 9- **A device which converts electrical energy into mechanical energy is called:**
- (a) D.C. motor ✓ (b) Generator
(c) Transformer (d) All of these
- 10- **The process by which electrons are emitted by a hot metal surface is known as:**
- (a) Boiling (b) Evaporation
(c) Conduction (d) Thermionic emission ✓
- 11- **What does the term e-mail stand for:**
- (a) Emergency mail (b) Electronic mail ✓
(c) Extra mail (d) External mail
- 12- **One isotope of uranium is ${}_{92}^{238}\text{U}$. The number of neutrons in this isotope is:**
- (a) 92 (b) 238
(c) 146 ✓ (d) 330